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(RG: V. 11-2000)	COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER	
TRANSMITTAL LETTER TO THE UNITED STATES		063511/9052	
DESIGNATED/ELECTED OFFICE (DO/EO/US)		U.S. APPLICATION NO. (If known, see 37 CFR 1.5	
CONCERNING A FILING UNDER 35 U.S.C. 371 10/088831			
INTERNATIONAL APPLICATION NO PCT/GB01/03349	D. INTERNATIONAL FILING DATE 25 July 2001 (25.07.01)	PRIORITY DATE CLAIMED 25 July 2000 (25.07.00)	
TITLE OF INVENTION	20 daily 2001 (20.07:01)	23 3diy 2000 (23.07.00)	
PIPE NETWORK OPTIMISATION			
APPLICANT(S) FOR DO/EO/US United Utilities, PLC			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information			
1. X This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.			
2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.			
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.			
4. The US has been elected by the expiration of 19 months from the priority date (Article 31).			
5. X A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. \(\subseteq \) is attached hereto (required only if not communicated by the International Russey)			
a. is attached hereto (required only if not communicated by the International Bureau). b. in has been communicated by the International Bureau.			
c. is not required, as the application was filed in the United States Receiving Office (RO/US).			
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).			
a. is attached hereto.			
b. has been previously submitted under 35 U.S.C. 154(d)(4).			
7. Amendments to the claims of the International Aplication under PCT Article 19 (35 U.S.C. 371(c)(3))			
 are attached hereto (required only if not communicated by the International Bureau). 			
b. have been communicated by the International Bureau.			
 have not been made; however, the time limit for making such amendments has NOT expired. 			
d. have not been made and will not be made.			
8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).			
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).			
10: An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).			
Items 11 to 20 below concern document(s) or information included:			
11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.			
12. An assignment document for re-	2. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.		
13. X A FIRST preliminary amendme	A FIRST preliminary amendment.		
14. A SECOND or SUBSEQUENT preliminary amendment.			
15. A substitute specification.			
16. A change of power of attorney and/or address letter.			
17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.			
18. A second copy of the published international application under 35 U.S.C. 154(d)(4).			
19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).			
20. Other items or information:	Express Mail Label No. EL671258899US I hereby certify that this paper or fee is being deposit "Express Mail Post Office to Addressee" service und	ed with the United States Postal Service	
	and is addressed to Box PCT, Assistant Commission	er for Patents, Washington, D.C. 20231.	
	John Anderson	3-22-02	
page 1 of 2	Apr Anna soll	Date of Deposit	

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1 Printer PETPTO 2 2 MAR-2002 TTORNEYS DOCKET MIR ORS PCT/GB01/03349 063511/9052 CALCULATIONS PTO USE ONLY 21. X The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. \$1000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT = \$ 890.00 Surcharge of \$130.00 for furnishing the oath or declaration later than 20 months from the earliest claimed priority date (37 CFR 1.492(e)). NUMBER FILED NUMBER EXTRA RATE 54-20 = Total claims 34 x \$18.00 \$ 612.00 Independent claims 3 - 3 = 0 × \$80.00 \$ MULTIPLE DEPENDENT CLAIM(S) (if applicable) S + \$270.00 TOTAL OF ABOVE CALCULATIONS \$ 1.502.00 Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2. \$ 1,502.00 Processing fee of \$130.00 for furnishing the English translation later than 20 30 months from the earliest claimed priority date (37 CFR 1.492(f)). TOTAL NATIONAL FEE 1.502.00 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED 1.502.00 Amount to be \$ refunded: \$ charged: a. X A check in the amount of \$1,502.00 to cover the above fees is enclosed. Please charge my Deposit Account No. in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. X The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 13-3080. A duplicate copy of this sheet is enclosed. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: SIGNATURE David B. Smith David B. Smith Michael Best & Friedrich LLP NAME 100 East Wisconsin Avenue

> 27,595 REGISTRATION NUMBER

Milwaukee, WI 53202-4108